

Appl. No. 10/810,879

Reply to Office action of March 25, 2005

AMENDMENTS TO THE CLAIMS*Please amend the claims without prejudice or disclaimer to read as follows:*

1 (currently amended). A method of generating a signal comprising:
 ~~providing processing a user input received on a capacitive touch sensor pad~~
including a matrix of X and Y conductors, the method comprising the steps of:[::]
 developing capacitance profiles in one of an X direction and a Y direction
from said matrix of X and Y conductors, said capacitance profiles identifying a presence of at
least two user input objects on said capacitive touch sensor pad;
 determining an occurrence of a single gesture resulting from the at least two
user input objects through an examination of said capacitance profiles, ~~said single gesture~~
including an application of at least two objects on said capacitive touch sensor pad; and
 ~~generating a signal~~ indicating the occurrence of said single gesture resulting
from said at least two user input objects.

2 (currently amended). The method of claim 1 wherein ~~said signal is single gesture~~
is indicated by a signal representing a simulated mouse button click.

3 (original). The method of claim 1 wherein developing capacitance profiles
comprises developing capacitance profiles in both said X and Y directions from said matrix of
X and Y conductors.

4 (currently amended). A capacitive sensor comprising:
 a matrix of X and Y conductors;
 sensing circuitry coupled to each of said X and Y conductors and configured
to generate outputs based on the capacitance of said X and Y conductors; and
 an arithmetic unit coupled to said sensing circuitry and configured to develop
a first capacitance profile in an X direction in response to said outputs of said sensing circuitry,
and to determine an occurrence of a single gesture resulting from the proximity of at least two
input objects to said matrix of X and Y conductors through an examination of said first

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capacitance profile, ~~said single gesture including an application of at least two objects to said capacitive sensor.~~

5 (original). The capacitive sensor of claim 4 wherein said sensing circuitry is configured to drive said X conductors simultaneously, and to drive said Y conductors simultaneously, wherein said X conductors are driven separately from said Y conductors.

6 (original). The capacitive sensor of claim 4 wherein said arithmetic unit is configured to develop a second capacitance profile in a Y direction in response to said outputs of said sensing circuitry.

7 (original). The capacitive sensor of claim 4 wherein said arithmetic unit is configured to differentiate between an application of a single object and an application of multiple objects to the capacitive sensor.

8 (new). The method of claim 1 wherein the at least two input objects are fingers.

9 (new). The capacitive sensor of claim 4 wherein the at least two input objects are fingers.

10 (new). An input device comprising:
a matrix of conductors;
sensing circuitry coupled to each of said conductors and configured to generate outputs based on the capacitance of said conductors; and
an arithmetic unit coupled to said sensing circuitry and configured to develop at least one capacitance profile in response to said outputs of said sensing circuitry, to determine an occurrence of a single gesture resulting from the proximity of at least two input objects to said matrix of conductors through an examination of said at least one capacitance profile, and to indicate the occurrence of said single gesture resulting from said at least two input objects.